

Rotary brush device and vacuum cleaner using the same**Patent number:** EP0947155**Publication date:** 1999-10-06**Inventor:** NISHIMURA HIROSHI (JP); HAYASHI SEIZO (JP)**Applicant:** MATSUSHITA ELECTRIC IND CO LTD (JP)**Classification:****- international:** A47L9/04; A47L5/30; A47L9/28**- european:** A47L9/28B2, A47L9/28B4, A47L9/04, A47L5/28, A47L5/30, A47L9/02, A47L9/28, A47L9/28B**Application number:** EP19990106662 19990401**Priority number(s):** US19980055020 19980403**Also published as:**

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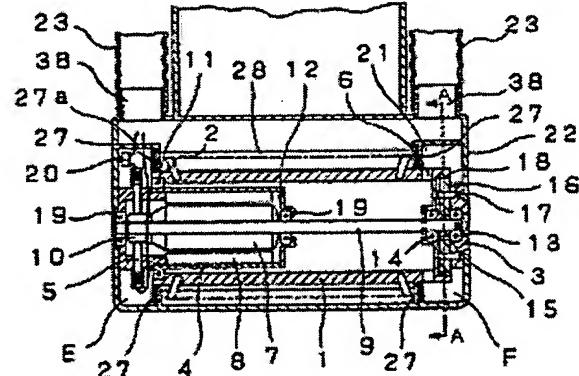
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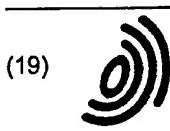
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A motor is incorporated in a cylindrical body which is a rotary brush. Rotation of a rotor of the motor, directly or via a speed reduction mechanism, drives the rotary brush. Cooling air runs through the cylindrical body so that the motor is cooled and protected. The rotary brush and an electric apparatus using the rotary brush can be downsized and easily.





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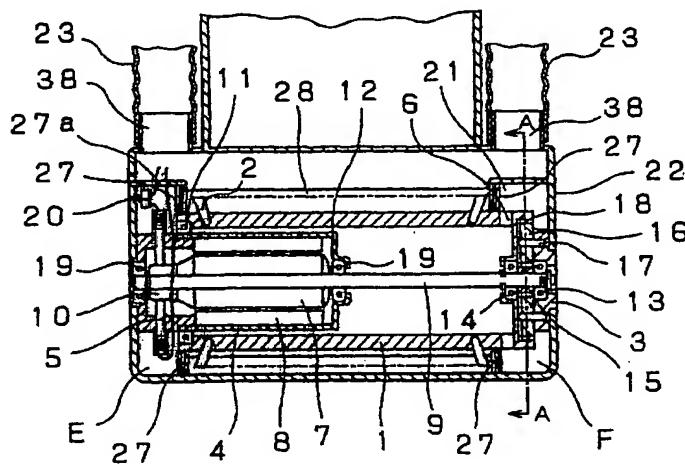
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(54) Rotary brush device and vacuum cleaner using the same

(57) A motor is incorporated in a cylindrical body which is a rotary brush. Rotation of a rotor of the motor, directly or via a speed reduction mechanism, drives the

rotary brush. Cooling air runs through the cylindrical body so that the motor is cooled and protected. The rotary brush and an electric apparatus using the rotary brush can be downsized and easily.

Fig. 2



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